R Basics

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What is R?

- Free, open source
- Started in 1993
- Geared towards scientific computing
  - Created by Ross Ihaka and Robert Gentleman (statisticians)
- Interpreted; similar to Python and MATLAB

First Script: Hello World!

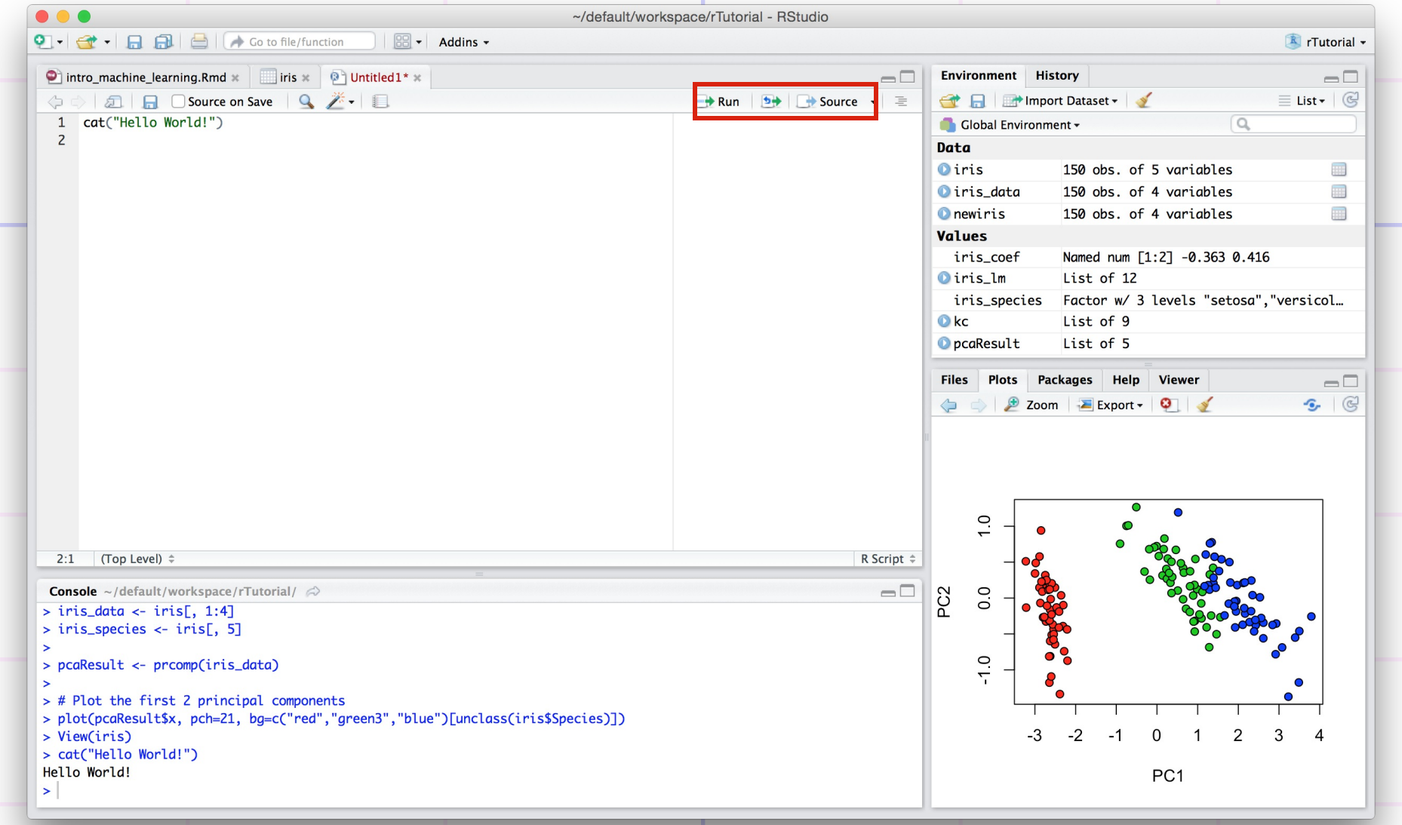
- `cat()` prints a simple message in the console

```
cat("Hello World!")
```

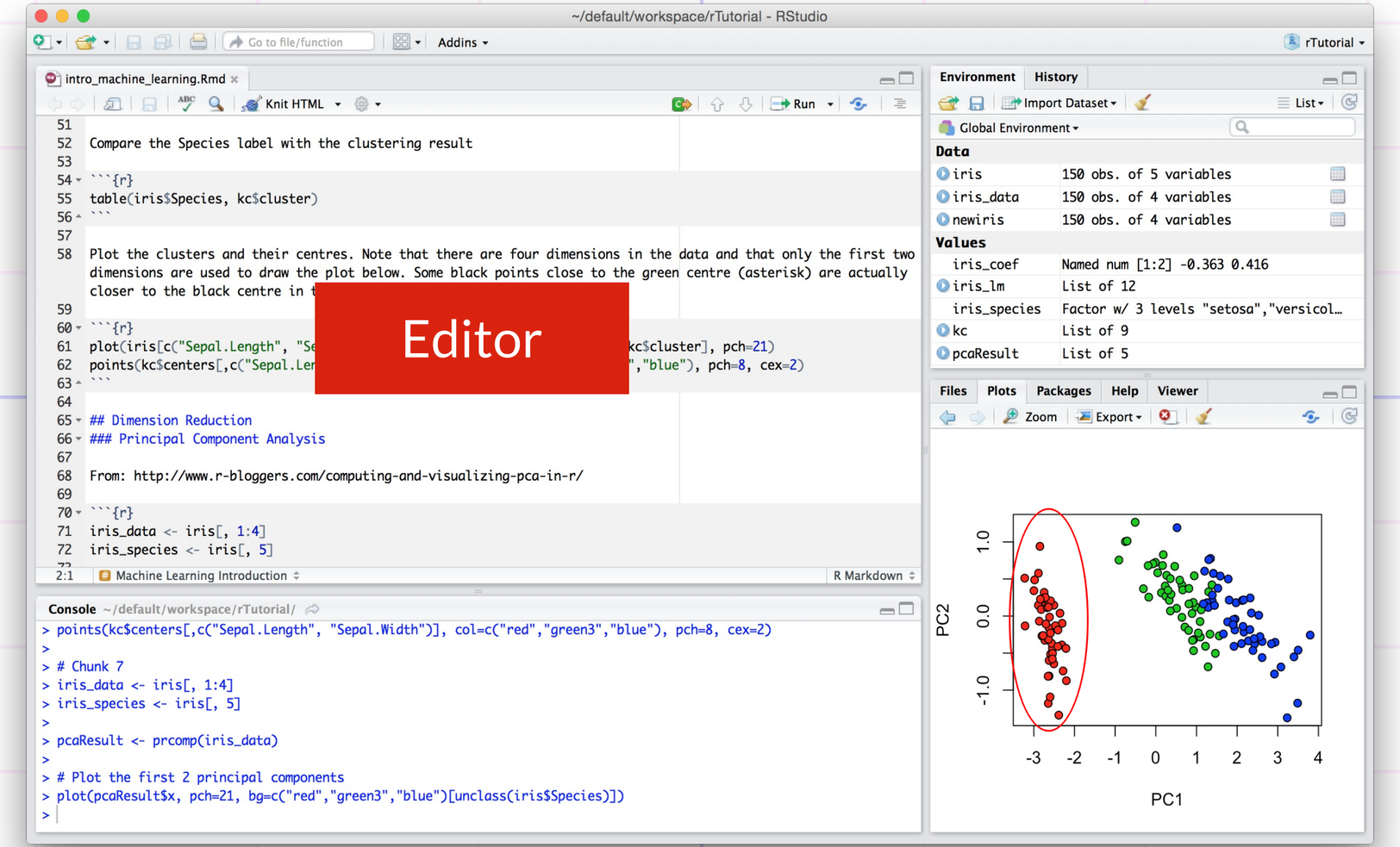
```
Hello World!
```

Running Hello World Script

- “Run” button runs current line or selected lines
- “Source” button runs all lines in file



RStudio Overview



Top 20 Packages (kdnuggets.com)

Package	Downloads
Rcpp	693288
ggplot2	598484
stringr	543434
plyr	523220
digest	521344
reshape2	483065
colorspace	476304
RColorBrewer	453858
manipulate	395232
scales	394389

Package	Downloads
labeling	373374
proto	369096
munsell	368949
gtable	364015
dichromat	362562
mime	352780
RCurl	340530
bitops	322743
zoo	302052
knitr	295528